

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:33:08 ON 08 SEP 2006

=> file pnttext

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'EPFULL' ENTERED AT 10:33:26 ON 08 SEP 2006

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FILE 'PCTFULL' ENTERED AT 10:33:26 ON 08 SEP 2006

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FILE 'RDISCLOSURE' ENTERED AT 10:33:26 ON 08 SEP 2006

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FILE 'USPATFULL' ENTERED AT 10:33:26 ON 08 SEP 2006

CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 10:33:26 ON 08 SEP 2006

CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=> s porous polymeric component# and second polymeric component# and
interpenetrating network

5 FILES SEARCHED...

L1 3 POROUS POLYMERIC COMPONENT# AND SECOND POLYMERIC COMPONENT# AND
INTERPENETRATING NETWORK

=> s l1 and shape persistent

L2 3 L1 AND SHAPE PERSISTENT

=> d l2 1-3

L2 ANSWER 1 OF 3 PCTFULL COPYRIGHT 2006 Univentio on STN

AN 2002016463 PCTFULL ED 20020711 EW 200209

TIEN POLYMERS WITH HIGH INTERNAL FREE VOLUME

TIFR POLYMERES A VOLUME INTERIEUR LIBRE IMPORTANT

IN SWAGER, Timothy, M., 18 Copley Street, Newton, MA 02158, US;

LONG, Timothy, M., 72 Brookline Street, Apt. 201, Cambridge, MA 02139,
US;

ZHU, Zhengguo, 2456 Massachusetts Avenue, Apt. 302, Cambridge, MA 02140,
US

PA MASSACHUSETTS INSTITUTE OF TECHNOLOGY, 77 Massachusetts Avenue,
Cambridge, MA 02139, US [US, US]

AG OYER, Timothy, J., Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue,
Boston, MA 02210, US

LAF English

LA English

DT Patent

PI WO 2002016463

A2 20020228

DS W:

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN

MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR
 TT TZ UA UG UZ VN YU ZA ZW
 RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZW
 RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
 RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
 RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
 AI WO 2001-US26293 A 20010821
 PRAI US 2000-60/226,506 20000821
 ICM C08G061-00

L2 ANSWER 2 OF 3 USPATFULL on STN
 AN 2004:221007 USPATFULL
 TI Polymers with high internal free volume
 IN Swager, Timothy M., Newton, MA, UNITED STATES
 Long, Timothy M., Cambridge, MA, UNITED STATES
 Zhu, Zhengguo, Cambridge, MA, UNITED STATES
 PI US 2004170775 A1 20040902
 AI US 2004-764768 A1 20040126 (10)
 RLI Continuation of Ser. No. US 2001-935060, filed on 21 Aug 2001, PENDING
 PRAI US 2000-226506P 20000821 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 1949
 INCL INCLM: 428/001.100
 INCLS: 526/280.000; 349/001.000
 NCL NCLM: 428/001.100
 NCLS: 257/E21.259; 257/E51.049; 349/001.000; 526/280.000
 IC [7]
 ICM C08F032-00
 IPCI C08F0032-00 [ICM,7]
 IPCR C08G0061-00 [I,C*]; C08G0061-02 [I,A]; C08G0061-10 [I,A];
 C08G0061-12 [I,A]; C09K0011-06 [I,A]; C09K0011-06 [I,C*];
 C09K0019-38 [I,A]; C09K0019-38 [I,C*]; H01B0001-12 [I,A];
 H01B0001-12 [I,C*]; H01L0021-02 [I,C*]; H01L0021-312 [I,A];
 H01L0051-05 [I,C*]; H01L0051-30 [I,A]
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 3 OF 3 USPATFULL on STN
 AN 2002:272580 USPATFULL
 TI Polymers with high internal free volume
 IN Swager, Timothy M., Newton, MA, UNITED STATES
 Long, Timothy M., Cambridge, MA, UNITED STATES
 Zhu, Zhengguo, Cambridge, MA, UNITED STATES
 PI US 2002150697 A1 20021017
 US 6783814 B2 20040831
 AI US 2001-935060 A1 20010821 (9)
 PRAI US 2000-226506P 20000821 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 1943
 INCL INCLM: 428/001.100
 INCLS: 252/299.010; 252/299.620; 252/299.100; 430/020.000
 NCL NCLM: 428/011.000; 428/001.100
 NCLS: 252/299.400; 257/E21.259; 257/E51.049; 349/001.000; 525/063.000;
 252/299.010; 252/299.100; 252/299.620; 430/020.000
 IC [7]
 ICM C09K019-38
 ICS C09K019-32; G02F001-03; C09K019-52
 IPCI C09K0019-38 [ICM,7]; C09K0019-32 [ICS,7]; G02F0001-03 [ICS,7];
 G02F0001-01 [ICS,7,C*]; C09K0019-52 [ICS,7]
 IPCI-2 A47G0033-04 [ICM,7]; A47G0033-00 [ICM,7,C*]; C09K0019-38 [ICS,7];
 C09K0019-32 [ICS,7]; C09K0019-52 [ICS,7]
 IPCR C08G0061-00 [I,C*]; C08G0061-02 [I,A]; C08G0061-10 [I,A];
 C08G0061-12 [I,A]; C09K0011-06 [I,A]; C09K0011-06 [I,C*];

C09K0019-38 [I,A]; C09K0019-38 [I,C*]; H01B0001-12 [I,A];
H01B0001-12 [I,C*]; H01L0021-02 [I,C*]; H01L0021-312 [I,A];
H01L0051-05 [I,C*]; H01L0051-30 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s ladder polymer# and iptycene
L3 17 LADDER POLYMER# AND IPTYCENE

=> s l3 and backbone and breaking at least two bond#
L4 0 L3 AND BACKBONE AND BREAKING AT LEAST TWO BOND#

=> s l3 and shape persistent molecule#
L5 7 L3 AND SHAPE PERSISTENT MOLECULE#

=> s l5 and van der waals
4 FILES SEARCHED...
L6 7 L5 AND VAN DER WAALS

=> s l6 and bridgehead#
L7 7 L6 AND BRIDGEHEAD#

=> d 17 1-7

L7 ANSWER 1 OF 7 PCTFULL COPYRIGHT 2006 Univentio on STN
AN 2004007634 PCTFULL ED 20040129 EW 200404
TIEN EMISSIVE, HIGH CHARGE TRANSPORT POLYMERS
TIFR POLYMERES EMISSIFS A TRANSPORT DE CHARGE ELEVE
IN SWAGER, Timothy, M., 18 Copley Street, Newton, MA 02158, US;
ZAHN, Steffan, 112 High Street, Waltham, MA 02453, US
PA MASSACHUSETTS INSTITUTE OF TECHNOLOGY, 77 Massachussets Avenue,
Cambridge, MA 02139, US [US, US]
AG OYER, Timothy, J., Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue,
Boston, MA 02210, US
LAF English
LA English
DT Patent
PI WO 2004007634 A2 20040122
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN
MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL
SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC
NL PT RO SE SI SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
AI WO 2003-US22702 A 20030715
PRAI US 2002-60/396,028 20020715
ICM C09K009-00

L7 ANSWER 2 OF 7 PCTFULL COPYRIGHT 2006 Univentio on STN
AN 2002016463 PCTFULL ED 20020711 EW 200209
TIEN POLYMERS WITH HIGH INTERNAL FREE VOLUME
TIFR POLYMERES A VOLUME INTERIEUR LIBRE IMPORTANT
IN SWAGER, Timothy, M., 18 Copley Street, Newton, MA 02158, US;
LONG, Timothy, M., 72 Brookline Street, Apt. 201, Cambridge, MA 02139,
US;
ZHU, Zhengguo, 2456 Massachusetts Avenue, Apt. 302, Cambridge, MA 02140,
US
PA MASSACHUSETTS INSTITUTE OF TECHNOLOGY, 77 Massachusetts Avenue,
Cambridge, MA 02139, US [US, US]
AG OYER, Timothy, J., Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue,

Boston, MA 02210, US
 LAF English
 LA English
 DT Patent
 PI WO 2002016463 A2 20020228
 DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU
 CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
 IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN
 MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR
 TT TZ UA UG UZ VN YU ZA ZW
 RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZW
 RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
 RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
 RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
 AI WO 2001-US26293 A 20010821
 PRAI US 2000-60/226,506 20000821
 ICM C08G061-00

L7 ANSWER 3 OF 7 USPATFULL on STN
 AN 2004:221007 USPATFULL
 TI Polymers with high internal free volume
 IN Swager, Timothy M., Newton, MA, UNITED STATES
 Long, Timothy M., Cambridge, MA, UNITED STATES
 Zhu, Zhengguo, Cambridge, MA, UNITED STATES
 PI US 2004170775 A1 20040902
 AI US 2004-764768 A1 20040126 (10)
 RLI Continuation of Ser. No. US 2001-935060, filed on 21 Aug 2001, PENDING
 PRAI US 2000-226506P 20000821 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 1949
 INCL INCLM: 428/001.100
 INCLS: 526/280.000; 349/001.000
 NCL NCLM: 428/001.100
 NCLS: 257/E21.259; 257/E51.049; 349/001.000; 526/280.000
 IC [7]
 ICM C08F032-00
 IPCI C08F0032-00 [ICM,7]
 IPCR C08G0061-00 [I,C*]; C08G0061-02 [I,A]; C08G0061-10 [I,A];
 C08G0061-12 [I,A]; C09K0011-06 [I,A]; C09K0011-06 [I,C*];
 C09K0019-38 [I,A]; C09K0019-38 [I,C*]; H01B0001-12 [I,A];
 H01B0001-12 [I,C*]; H01L0021-02 [I,C*]; H01L0021-312 [I,A];
 H01L0051-05 [I,C*]; H01L0051-30 [I,A]
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 4 OF 7 USPATFULL on STN
 AN 2004:152428 USPATFULL
 TI Emissive, high charge transport polymers
 IN Swager, Timothy M., Newton, MA, UNITED STATES
 Zahn, Steffen, Pennsburg, PA, UNITED STATES
 PI US 2004116650 A1 20040617
 US 7041910 B2 20060509
 AI US 2003-621041 A1 20030715 (10)
 PRAI US 2002-396028P 20020715 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 1620
 INCL INCLM: 528/396.000
 INCLS: 204/400.000
 NCL NCLM: 528/396.000
 NCLS: 252/299.400; 252/582.000; 257/E21.259; 257/E51.028; 257/E51.036;
 257/E51.049; 349/001.000; 428/011.000; 525/063.000; 204/400.000
 IC [7]
 ICM C08G061-00

ICS G01N027-26
IPCI C08G0061-00 [ICM,7]; G01N0027-26 [ICS,7]
IPCI-2 H01B0007-00 [I,A]
IPCR C08G0061-00 [I,C*]; C08G0061-02 [I,A]; C09K0011-06 [I,A];
C09K0011-06 [I,C*]; H01L0051-05 [I,C*]; H01L0051-30 [I,A];
H01L0051-50 [N,A]; H01L0051-50 [N,C*]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 5 OF 7 USPATFULL on STN

AN 2002:272580 USPATFULL

TI Polymers with high internal free volume

IN Swager, Timothy M., Newton, MA, UNITED STATES

Long, Timothy M., Cambridge, MA, UNITED STATES

Zhu, Zhengguo, Cambridge, MA, UNITED STATES

PI US 2002150697 A1 20021017

US 6783814 B2 20040831

AI US 2001-935060 A1 20010821 (9)

PRAI US 2000-226506P 20000821 (60)

DT Utility

FS APPLICATION

LN.CNT 1943

INCL INCLM: 428/001.100

INCLS: 252/299.010; 252/299.620; 252/299.100; 430/020.000

NCL NCLM: 428/011.000; 428/001.100

NCLS: 252/299.400; 257/E21.259; 257/E51.049; 349/001.000; 525/063.000;
252/299.010; 252/299.100; 252/299.620; 430/020.000

IC [7]

ICM C09K019-38

ICS C09K019-32; G02F001-03; C09K019-52

IPCI C09K0019-38 [ICM,7]; C09K0019-32 [ICS,7]; G02F0001-03 [ICS,7];

G02F0001-01 [ICS,7,C*]; C09K0019-52 [ICS,7]

IPCI-2 A47G0033-04 [ICM,7]; A47G0033-00 [ICM,7,C*]; C09K0019-38 [ICS,7];

C09K0019-32 [ICS,7]; C09K0019-52 [ICS,7]

IPCR C08G0061-00 [I,C*]; C08G0061-02 [I,A]; C08G0061-10 [I,A];

C08G0061-12 [I,A]; C09K0011-06 [I,A]; C09K0011-06 [I,C*];

C09K0019-38 [I,A]; C09K0019-38 [I,C*]; H01B0001-12 [I,A];

H01B0001-12 [I,C*]; H01L0021-02 [I,C*]; H01L0021-312 [I,A];

H01L0051-05 [I,C*]; H01L0051-30 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 6 OF 7 USPAT2 on STN

AN 2004:152428 USPAT2

TI Emissive, high charge transport polymers

IN Swager, Timothy M., Newton, MA, UNITED STATES

Zahn, Steffen, Pennsburg, PA, UNITED STATES

PA Massachusetts Institute of Technology, Cambridge, MA, UNITED STATES
(U.S. corporation)

PI US 7041910 B2 20060509

AI US 2003-621041 20030715 (10)

PRAI US 2002-396028P 20020715 (60)

DT Utility

FS GRANTED

LN.CNT 1793

INCL INCLM: 174/110.000

INCLS: 252/299.400; 252/582.000; 257/E21.259; 349/001.000; 428/011.000;
525/063.000

NCL NCLM: 528/396.000

NCLS: 252/299.400; 252/582.000; 257/E21.259; 257/E51.028; 257/E51.036;
257/E51.049; 349/001.000; 428/011.000; 525/063.000; 204/400.000

IC IPCI C08G0061-00 [ICM,7]; G01N0027-26 [ICS,7]

IPCI-2 H01B0007-00 [I,A]

IPCR C08G0061-00 [I,C*]; C08G0061-02 [I,A]; C09K0011-06 [I,A];

C09K0011-06 [I,C*]; H01L0051-05 [I,C*]; H01L0051-30 [I,A];

H01L0051-50 [N,A]; H01L0051-50 [N,C*]

EXF 174/110; 252/582; 252/299.4; 428/11; 257/E21.259; 349/1; 525/63
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 7 OF 7 USPAT2 on STN
AN 2002:272580 USPAT2
TI Polymers with high internal free volume
IN Swager, Timothy M., Newton, MA, United States
Long, Timothy M., Cambridge, MA, United States
Zhu, Zhengguo, Cambridge, MA, United States
PA Massachusetts Institute of Technology, Cambridge, MA, United States
(U.S. corporation)
PI US 6783814 B2 20040831
AI US 2001-935060 20010821 (9)
PRAI US 2000-226506P 20000821 (60)
DT Utility
FS GRANTED
LN.CNT 1956
INCL INCLM: 428/011.000
INCLS: 428/001.000; 525/063.000; 252/299.400; 349/001.000
NCL NCLM: 428/011.000; 428/001.100
NCLS: 252/299.400; 257/E21.259; 257/E51.049; 349/001.000; 525/063.000;
252/299.010; 252/299.100; 252/299.620; 430/020.000
IC [7]
ICM A47G033-04
ICS C09K019-38; C09K019-32; C09K019-52
IPCI C09K0019-38 [ICM,7]; C09K0019-32 [ICS,7]; G02F0001-03 [ICS,7];
G02F0001-01 [ICS,7,C*]; C09K0019-52 [ICS,7]
IPCI-2 A47G0033-04 [ICM,7]; A47G0033-00 [ICM,7,C*]; C09K0019-38 [ICS,7];
C09K0019-32 [ICS,7]; C09K0019-52 [ICS,7]
IPCR C08G0061-00 [I,C*]; C08G0061-02 [I,A]; C08G0061-10 [I,A];
C08G0061-12 [I,A]; C09K0011-06 [I,A]; C09K0011-06 [I,C*];
C09K0019-38 [I,A]; C09K0019-38 [I,C*]; H01B0001-12 [I,A];
H01B0001-12 [I,C*]; H01L0021-02 [I,C*]; H01L0021-312 [I,A];
H01L0051-05 [I,C*]; H01L0051-30 [I,A]
EXF 428/11; 428/1; 525/63; 252/299.01; 349/1
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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